

ABSTRACT

An input / output data queuing apparatus and method for data transfer between a control processor and a time division multiplex modem is disclosed. A plurality of queues within the modem is accessed through a queue selection block controlled by a timing control block that is in turn controlled via software. This allows directed multiplexing of specific data types into specific TDM transmission slots and retrieval and de-multiplexing of specific data types from the received TDM data stream. A plurality of processor queues feeds each queue allowing prioritisation of the transmitted data elements. This eases processor requirements, maximises the use of the available transmission slots and provides an access mechanism that is adaptable to a wide range of systems.